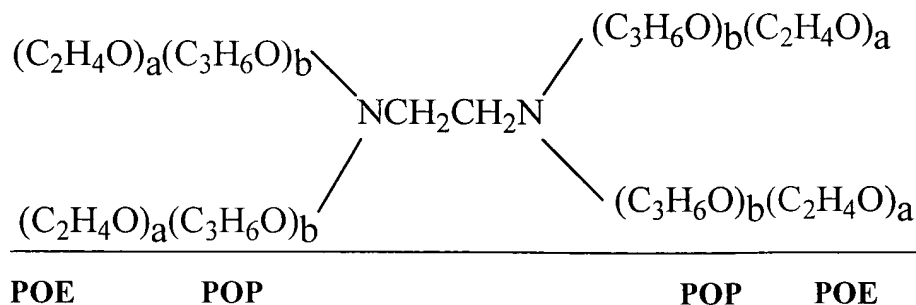
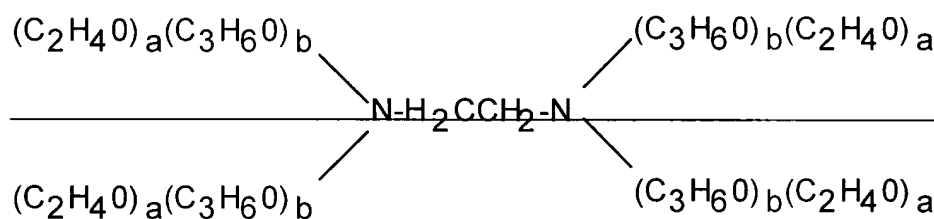


Amendments to the Specification

In accordance with revised 37 C.F.R. § 1.121, please amend the specification as follows, with deletions shown by strikethrough and additions shown by underlining:

Please amend the paragraph beginning on page 7, line 16 and ending on page 8, line 14 as follows:

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In another aspect, the present invention comprises a therapeutic delivery composition effective for treating a disease state, comprising an administerable admixture of an effective amount of a therapeutic compound capable of altering nucleic acid sequence function and an effective amount of a biologically-active copolymer, comprising a copolymer of polyoxyethylene (POE), which is hydrophilic, and polyoxypropylene (POP), which is hydrophobic. The block copolymer is built on a tetrafunctional ethylenediamine initiator. In the preferred embodiment of the biologically-active copolymers of the present invention, the block copolymers that comprise the biologically-active copolymers of the present invention have the following general formulas:



wherein:

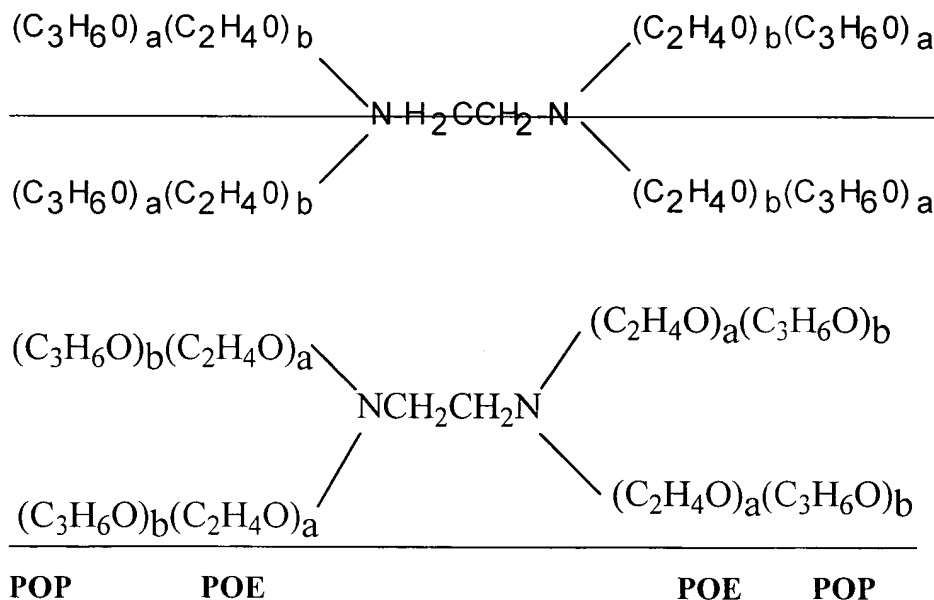
the mean aggregate molecular weight of the hydrophobe portion of the octablock copolymer consisting of polyoxypropylene (C₃H₆O)_b (POP) is between approximately 5000 and 7000 daltons Daltons;

a is a number such that the hydrophile portion represented by polyoxyethylene $(C_2H_4O)_a$ (POE) constitutes between approximately 10% to 40% of the total molecular weight of the ~~compound~~ octablock copolymer; and

b is a number such that the polyoxypropylene $(C_3H_6O)_b$ (POP) portion of the total molecular weight of the octablock copolymer constitutes between approximately 60% and 90% of the ~~compound~~ copolymer.

Please amend the paragraph beginning on page 8, line 15 and ending on page 9, line 8 as follows:

In another aspect of the present invention, the biologically-active copolymer comprises a polymer of hydrophilic polyoxyethylene (POE) built on an ethylene diamine initiator. Polymers of hydrophobic polyoxypropylene (POP) are then added to the blocks of hydrophilic polyoxyethylene (POE). This results in an octablock copolymer with the general formula:



wherein:

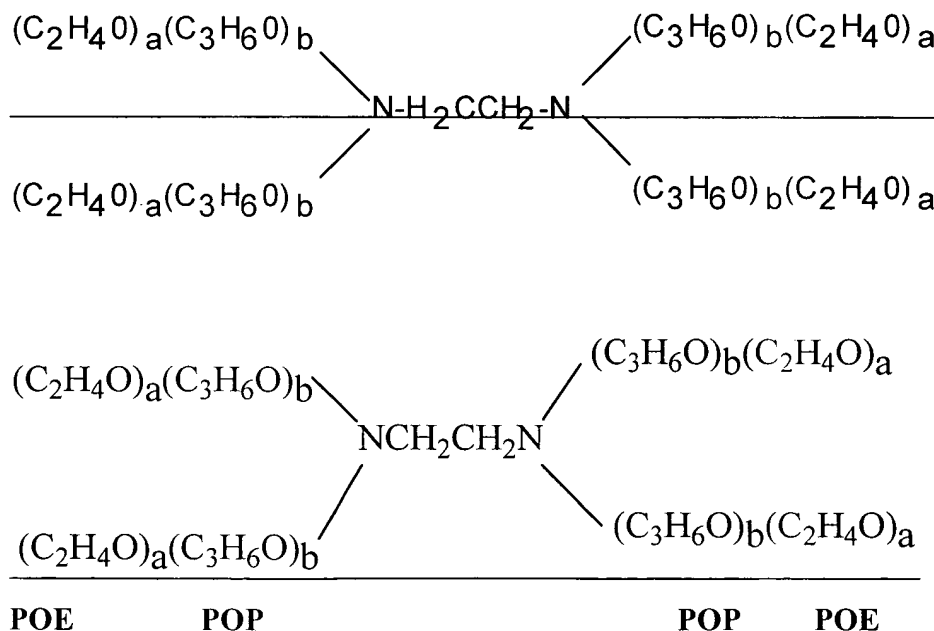
a is a number such that the hydrophile portion represented by polyoxyethylene $(C_2H_4O)_a$ (POE) constitutes between approximately 10% to 40% of the total molecular weight of the ~~compound~~ octablock copolymer;

the mean aggregate molecular weight of the hydrophobe portion of the octablock copolymer consisting of polyoxypropylene (C₃H₆O)_b (POP) is between approximately 5000 and 7000 ~~daltons~~ Daltons; and

b is a number such that the polyoxypropylene (C₃H₆O)_b (POP) portion of the total molecular weight of the octablock copolymer constitutes between approximately 60% and 90% of the ~~compound~~ copolymer.

Please amend the paragraph beginning on page 23, line 11 and ending on page 24, line 6 as follows:

In one aspect of the biologically active POE/POP copolymers of the present invention, the block copolymer comprises a polymer of hydrophobic polyoxypropylene (POP) built on an ethylene diamine initiator. Polymers of hydrophilic polyoxyethylene (POE) are then built on the ~~block~~ blocks of hydrophobic polypropylene (POP). This results in an octablock copolymer with the following general formula:



wherein:

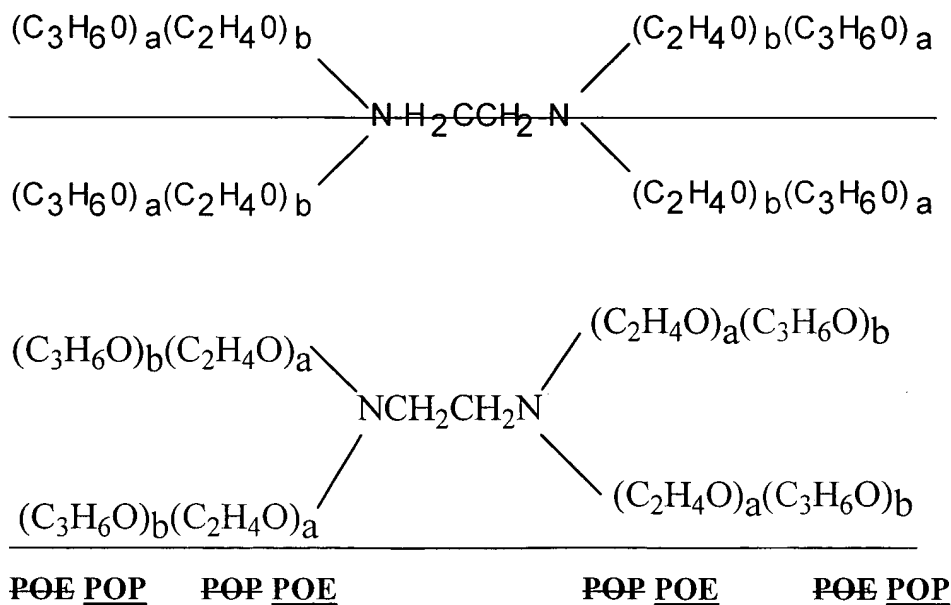
the mean aggregate molecular weight of the hydrophobe portion of the octablock copolymer consisting of polyoxypropylene (C₃H₆O)_b (POP) is between approximately 5000 and 7000 ~~daltons~~ Daltons;

a is a number such that the hydrophile portion represented by polyoxyethylene (C₂H₄O)_a (POE) constitutes between approximately 10% to 40% of the total molecular weight of the ~~compound~~ octablock copolymer; and

b is a number such that the polyoxypropylene (C₃H₆O)_b (POP) portion of the total molecular weight of the octablock copolymer constitutes between approximately 60% and 90% of the ~~compound~~ copolymer.

Please amend the paragraph beginning on page 24, line 7 and ending on page 24, line 31 as follows:

In another aspect of the present invention, the POE/POP block copolymer comprises a polymer of hydrophilic polyoxyethylene (POE) built on an ethylene diamine initiator. Polymers of hydrophobic polyoxypropylene (POP) are then built on the ~~block blocks~~ of hydrophilic polyethylene (POE). This results in an octablock copolymer with the general formula:



wherein:

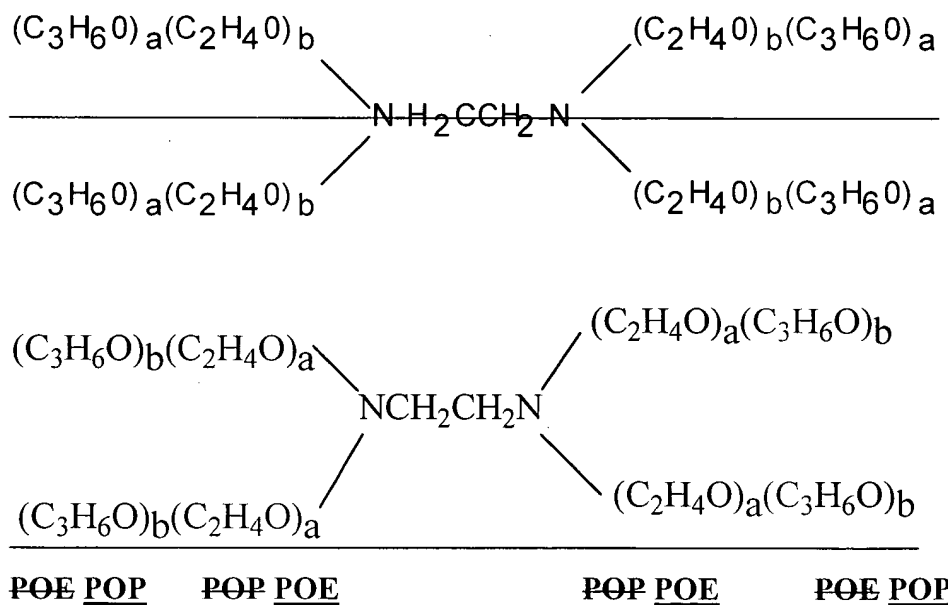
The the molecular weight of the hydrophobe portion of the octablock copolymer consisting of polyoxypropylene (C₃H₆O)_b (POP) is between approximately 5000 and 7000 ~~daltons~~ Daltons;

a is a number such that the hydrophile portion represented by polyoxyethylene (C₂H₄O)_a (POE) constitutes between approximately 10% and 40% of the total molecular weight of the ~~compound~~ octablock copolymer; and

b is a number such that the polyoxypropylene (C₃H₆O)_b (POP) portion of the octablock copolymer constitutes between approximately 60% and 90% of the ~~compound~~ copolymer.

Please amend the paragraph beginning on page 25, line 23 and ending on page 26, line 10 as follows:

A preferred biologically active copolymer is the octablock copolymer T110R1 (BASF Corporation, Parsippany, NJ) which corresponds to the following formula:



wherein:

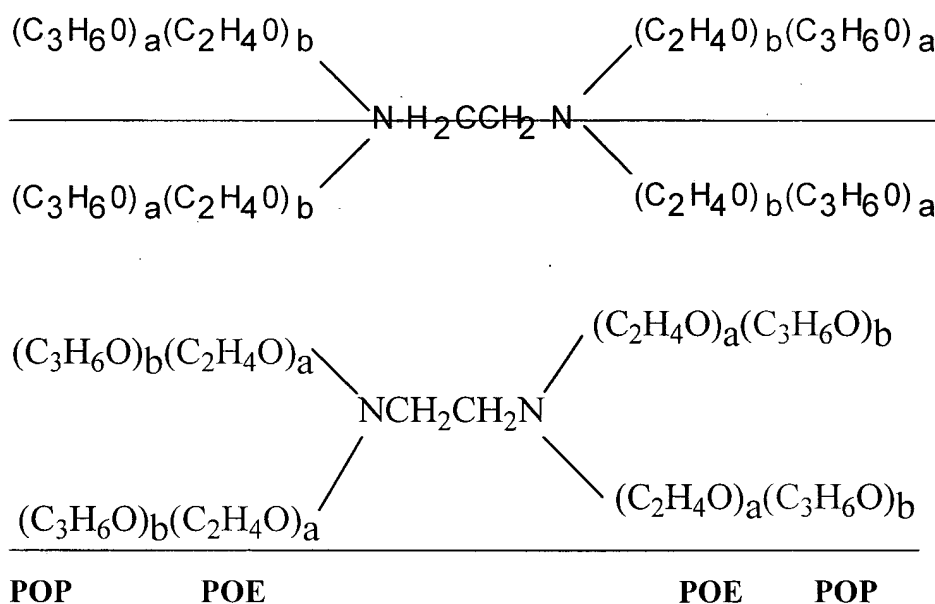
The the mean molecular weight of the hydrophobe portion of the octablock copolymer represented by polyoxypropylene (C₃H₆O)_b (POP) is between approximately 5,220 ~~daltons~~ Daltons;

a is a number such that the hydrophile portion represented by polyoxyethylene (C₂H₄O)_a (POE) constitutes between approximately 10% of the ~~compound~~ octablock copolymer by weight; and

b is a number such that the polyoxypropylene (C₃H₆O)_b (POP) portion of the octablock copolymer constitutes approximately 90% of the ~~compound~~ copolymer by weight.

Please amend the paragraph beginning on page 26, line 11 and ending on page 26, line 29 as follows:

A preferred biologically active ~~copolymers~~ copolymer is the octablock copolymer T130R2 (BASF Corporation, Parsippany, NJ) which corresponds to the following formula:



wherein:

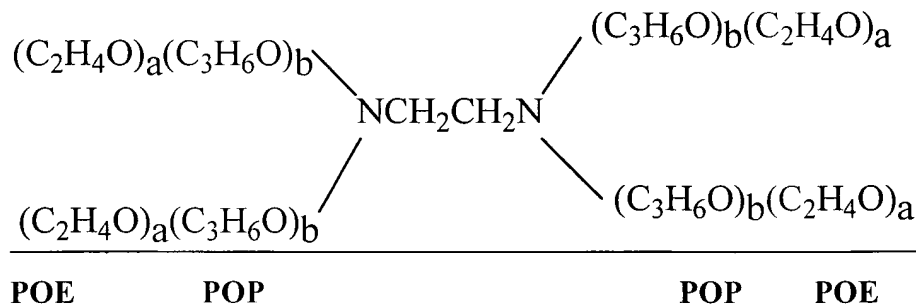
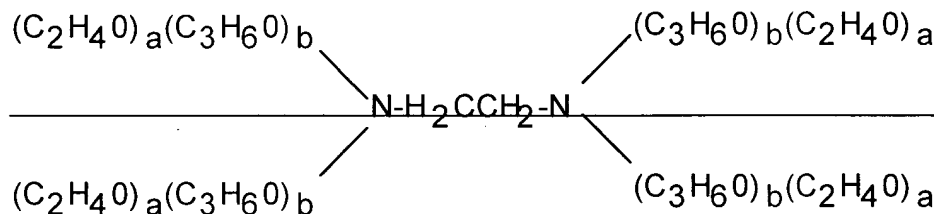
The the mean molecular weight of the hydrophobe portion of the octablock copolymer represented by polyoxypropylene (C₃H₆O)_b (POP) is between approximately 5750 ~~daltons~~ Daltons;

a is a number such that the hydrophile portion represented by polyoxyethylene $(C_2H_4O)_a$ (POE) constitutes approximately 20% of the ~~compound~~ octablock copolymer by weight; and

b is a number such that the polyoxypropylene $(C_3H_6O)_b$ (POP) portion of the octablock copolymer constitutes approximately 80% of the ~~compound~~ copolymer by weight.

Please amend the paragraph beginning on page 26, line 30 and ending on page 27, line 19 as follows:

Another preferred embodiment of the biologically active copolymers of the present invention is the ~~compound~~ copolymer designated T1501 (BASF Corporation, Parsippany, NJ) which corresponds to the following formula:



wherein:

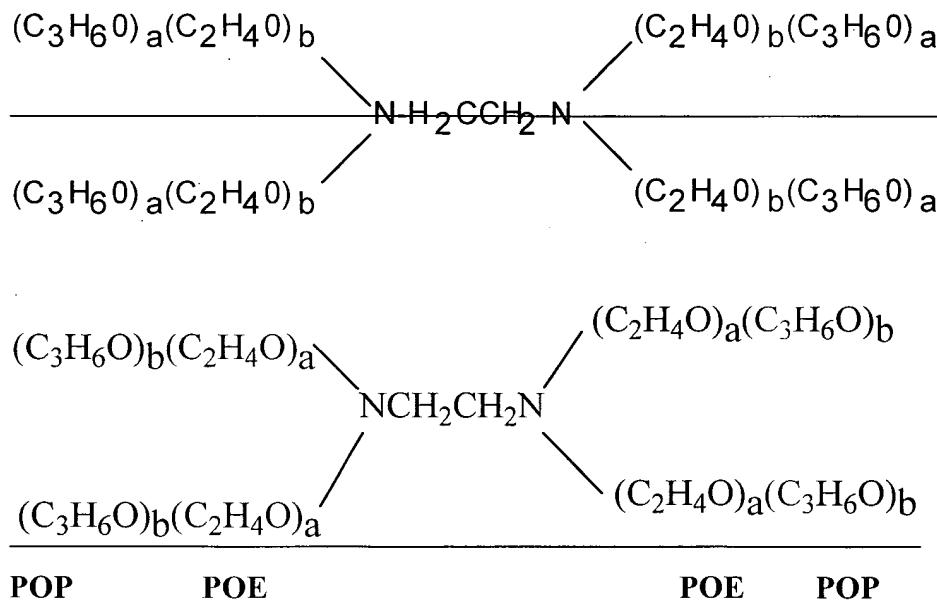
the mean molecular weight of the hydrophobe portion of the octablock copolymer represented by polyoxypropylene $(C_3H_6O)_b$ (POP) is between approximately 6750 Daltons ~~daltons~~;

a is a number such that the hydrophile portion represented by polyoxyethylene (C₂H₄O)_a (POE) constitutes between approximately 10% of the ~~compound~~ octablock copolymer by weight; and

b is a number such that the polyoxypropylene (C₃H₆O)_b (POP) portion of the octablock copolymer constitutes approximately 90% of the ~~compound~~ copolymer by weight.

Please amend the paragraph beginning on page 27, line 20 and ending on page 28, line 11 as follows:

The most preferred embodiment of the biologically active copolymers of the present invention is the octablock copolymer T150R1 (BASF Corporation, Parsippany, NJ) which corresponds to the following formula:



wherein:

The the mean molecular weight of the hydrophobe portion of the octablock copolymer represented by polyoxypropylene (C₃H₆O)_b (POP) is between approximately 6750 ~~daltons~~ Daltons;

a is a number such that the hydrophile portion represented by polyoxyethylene $(C_2H_4O)_a$ (POE) constitutes approximately 10% of the ~~compound~~ octablock copolymer by weight; and

b is a number such that the polyoxypropylene $(C_3H_6O)_b$ (POP) portion of the octablock copolymer constitutes approximately 90% of the ~~compound~~ copolymer by weight.

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